

NASA TECH BRIEF



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Slide Checkout Console

The problem:

To design a semiautomatic unit for handling copies of precision photographic material. Prior to the development of this device, photographic material, such as slides, was checked with a slide-file system in which the slides were inserted into the moving mechanism of the slide file by hand and viewed on a TV monitor.

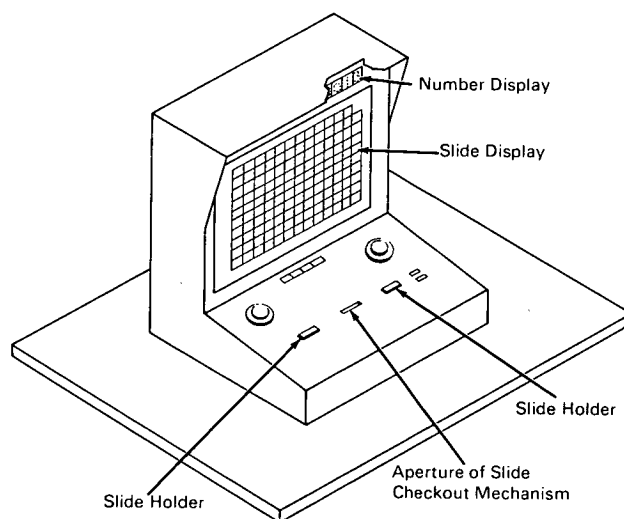
The solution:

A semiautomatic 35-mm photographic slide checkout console (see figure). This console (25 by 30 by 30 in.) can optically and electronically verify the registration of slides at a minimum rate of 250/hr.

How it's done:

The checkout console optically verifies the registration of a slide by comparing it with a registration standard contained within the console. It also electronically verifies a binary code number on the bottom of the slide and visually displays its decimal equivalent. Slides are inserted through an orifice into the console's mechanism and viewed on a projection screen with greater resolution than that of the TV monitor. It uses a self-contained code-verification and control electronics, rather than an external computer. Since the length of viewing time is variable, slides with considerable information can be viewed longer than those with little information.

The dimensions of the slide are 0.86 by 1.15 in. Magnification yields an image with a usable viewing area about 11 by 14 in. The projection lens has a minimum resolution of 60 lines/mm over the entire image area. The illumination intensity is variable, with a maximum level sufficient for viewing a projected slide image with a resolution of 60 lines/mm, at a maximum ambient light level of 75 ft-c incident upon the screen.



Pictorial Representation of the D/TV Slide Checkout Console

Notes:

1. Although this innovation was originally developed to aid in checking background slides for spaceborne digital television application, it may be employed to reduce the manual labor involved in photographic sorting and analysis, and may also aid in mass screening of photography in programs involving earth resources and biomedical radiography. As such, the device may be of interest in the design, development, and use of many photographic storage and retrieval systems.
2. No additional documentation is available. Specific questions, however, may be directed to:

Technology Utilization Officer
Manned Spacecraft Center
Code BM7
Houston, Texas 77058
Reference: B70-10290

(continued overleaf)

Patent status:

No patent action is contemplated by NASA.

Source: E. S. Sweningson and A. S. Nides of
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